ID Research - One possible research area:

Technological Evolution (TRIZ):

The only well-documented example we have of the evolution of complex multi-part integrated functional systems (like we see in biology) is the technological evolution of human inventions. In the second half of the twentieth century, Russian scientists and engineers studied hundreds of thousands of patents to determine how technologies evolve. They codified their findings in a theory to which they gave the acronym TRIZ, which in English translates to Theory of Inventive Problem Solving. The picture of technological evolution that emerges out of TRIZ maps amazingly well onto the history of life as we see it in the fossil record and includes the following:

> (1) New technologies (cf. major groups like phyla and classes) emerge suddenly as the solution of an inventive problem, which requires a major conceptual leap (cf. design).
> (2) Existing technologies (cf. species and genera) can, by contrast, be modified by trial and error tinkering (cf. Darwinian evolution), which amounts to solving a routine rather than an inventive problem. (The distinction between routine and inventive problems is central to TRIZ. In biology, irreducible complexity suggests one way of making the analytic cut between these types of problems. Are there other ways?)
> (3) Technologies approach ideality and thereafter tend not change (cf. stasis);
> (4) New technologies, by supplanting old technologies, can upset the ideality and stasis of the old technologies, thus forcing them to evolve in new directions (requiring the solution of new inventive problems, as in an arms race) or by driving them to extinction.

Mapping TRIZ onto biological evolution provides a potentially fruitful avenue of design-theoretic research that is entirely consonant with the principle of methodological engineering.

I need here to add a footnote about TRIZ. Most design critics, by conflating ID with creationism, see ID as committed to a designer who always designs from scratch and has to get everything right the first time. TRIZ, by contrast, bespeaks an evolutionary process that as much as possible takes advantage of existing designs but then at key moments requires a conceptual breakthrough to move the process of technological evolution along.

On this view, the process of technological evolution is itself designed. What's more, within that process, designing intelligences interact with natural forces. Does this mean that designer(s) is/are making things up as they go along? Not necessarily. The conceptual breakthroughs needed to drive technological evolution can be programmed from the start. And what about suboptimal and dysteleological design? These can be explained in part as the result of natural forces subverting an original design plan.

Teasing apart the effects of intelligence from natural forces thus becomes a key research question for a TRIZ approach to intelligent design.

From http://www.researchintelligentdesign.org/wiki/ID_research_questions